DRAFT EXPRESS TERMS
WITH PURPOSE & RATIONALE
Initial Date: 02/01/06
Revised as of:
00/00/06

The purpose of this Draft Express Terms with purpose and rationale is to place the 14 WorkGroup recommendations in numerical order and to show what has been submitted as suggested code amendments to the Office of the State Fire Marshal. It should be clearly noted that none of the changes have been accepted and/or rejected by the OSFM, but must be recognized as professional opinions of the various WorkGroups.

It should also be noted that this draft is a "living document", and will therefore be updated with regard to recommendations from the WorkGroups on a weekly basis (date of revisions will be noted above) until the Final Date scheduled for the Core Group to review any and all such recommended changes at it's meeting on March 17, 2006.

PROPOSED BUILDING STANDARDS OF THE OFFICE OF THE STATE FIRE MARSHAL

REGARDING PROPOSED CHANGES TO THE CALIFORNIA BUILDING CODE

Chapter 1 – Administration

SECTION 102

102.6 Existing structures. The legal occupancy of any structure existing on the date of adoption of this code shall be permitted to continue without change, except as is specifically covered in this code, the International Property Maintenance Code or the International Fire Code, or as is deemed necessary by the building official for the general safety and welfare of the occupants and the public.

[For SFM] Existing Residential Facilities and Residential Care Facilities for the Elderly which were originally classified as Group I Occupancies under pre-1991 codes and for Group R-2 occupancies in existence prior to the adoption of the International Building Code and International Fire Code may be reinspected under the appropriate previous code provided there is no change in the use which would place the facility in a different occupancy group.

Purpose and Rationale Statement (Workgroup):
Carry over of CBC 310.1.5 regarding existing RCFE's classified as I occupancies in pre-1991 codes and updated to also include R-2.

Action Taken (Core Group):

[ ] Approved
[ ] Returned for further Study/Clarification/Justification

[ ] Recommended for Next Code Adoption Cycle
[ ] Disapproved
[ ] Core Group Did Not Review (as of 01/09-11/06)

Chapter 2 – Definitions

SECTION 202
DEFINITIONS

AGED HOME OR INSTITUTION. [For SFM] See Section 310
BEDRIDDEN PERSON. [For SFM] See Section 310
CARE AND SUPERVISION. [For SFM] See Section 310
CATASTROPHICALLY INJURED. [For SFM] See Section 310
CHILD-CARE CENTER. [For SFM] See Section 310
CHILD OR CHILDREN. [For SFM] See Section 310
CHRONICALLY ILL. [For SFM] See "Terminally ill." Section 310
CONGREGATE LIVING HEALTH FACILITY (CLHF). [For SFM] See Section 310
CONGREGATE RESIDENCE. [For SFM] See Section 310
DAY CARE. [For SFM] See Section 419
DAY-CARE HOME, LARGE FAMILY. [For SFM] See Section 419
DAY-CARE HOME, SMALL FAMILY. [For SFM] See Section 419
FULL-TIME CARE. [For SFM] See Section 310
INFANT. [For SFM] See Section 310
MENTALLY RETARDED PERSONS, PROFOUNDLY OR SEVERELY. [For SFM] See Section 310
NONAMBULATORY PERSONS. [For SFM] See Section 310
RESIDENTIAL CARE FACILITY FOR THE ELDERLY (RCFE). [For SFM] See Section 310 RESIDENTIAL FACILITY (RF). [For SFM] See Section 310
RESTRAINT. [For SFM] See Section 310
TERMINALLY ILL. [For SFM] See Section 310

Purpose and Rationale Statement (Workgroup):
The above noted terms have been identified for carry over from the CBC to the IBC as they are necessary for various code applications.

Action Taken (Core Group):

[ ] Approved
[ ] Returned for further Study/Clarification/Justification
[ ] Recommended for Next Code Adoption Cycle
[ ] Disapproved
[X] Core Group Did Not Review (as of 01/09-11/06)

SECTION 202

PHOTOLUMINESCENT see section 1002.

Purpose and Rationale Statement (Workgroup):

Action Taken (Core Group):

[ ] Approved
[ ] Returned for further Study/Clarification/Justification
[ ] Recommended for Next Code Adoption Cycle
[ ] Disapproved
[X] Core Group Did Not Review (as of 01/09-11/06)

Chapter 3 – Use and Occupancy Classifications

Table 302.1.1

Table 302.1.1
Incidental use areas

ROOM OR AREA	SEPARATION
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Laboratories and vocational shops not classified as Group H, located in Group ~~E or~~ I-2 occupancies	1 hour or automatic fire-extinguishing system
Laboratories~~, and~~ vocational shops, And similar areas containing hazardous materials not classified as Group H, located in Group E[b] occupancies	1 hour ~~or automatic fire extinguishing system~~

a. Where an automatic fire-extinguishing system is provided, it need only be provided in the incidental use room or area.

b. Laboratories, vocational shops and similar areas containing hazardous materials not classified as Group H, located in Group E Occupancies shall be separated from each other and from other portions of the building.

Purpose and Rationale Statement (Workgroup):
The purpose of this proposed amendment is to sustain a comparable level of fire/life safety protection currently afforded in the CBC between laboratories, vocational shops, and similar areas containing hazardous materials not classified as Group H Occupancies, located in Group E ~~or I-2~~ occupancies [CBC 305.2.4] by modifying Table 302.1.1—Incidental Use Areas as noted above.

The current CBC code requires a minimum one-hour fire-resistive separation between laboratories, vocational shops and similar areas containing hazardous materials not classified as Group H, located in Group E occupancies from each other and from other portions of the building. In emergency situations it is felt that an automatic fire-

extinguishing is not as reliable as a one-hour fire-resistive separation and therefore does not provide a comparable level of protection. The added footnote clarifies that the require separations must be provided between the individual laboratories as well as from the other portions of the E occupancy.

Action Taken (Core Group):
Format for the 2006 code. The purpose and rationale statement shouldn't rely on the CBC as justification. The needs to be a clearer explanation of the risk hazards associated specific with Group E Occupancies to justify the change.

[ ] Approved
[X] Returned for further Study/Clarification/Justification
[ ] Recommended for Next Code Adoption Cycle
[ ] Disapproved
[ ] Core Group Did Not Review (as of 01/09-11/06)

305.1 Educational Group E.
Educational Group E occupancy includes, among others, the use of a building or structure, or a portion thereof, by six or more persons at any one time for educational purposes through the 12th grade. Religious educational rooms and religious auditoriums, which are accessory to churches in accordance with Section 302.2 and have occupant loads of less than 100, shall be classified as A-3 occupancies.

305.2 Day care.
The use of a building or structure, or portion thereof, for educational, supervision or personal care services for more than five children older than 2½ years of age, shall be classified as a Group E occupancy.
Exception: A Daycare *facility not otherwise classified as an R-3 Occupancy, where occupants are not capable of responding to an emergency situation without physical assistance from the staff shall be classified as Group I-4.*

Purpose and Rationale Statement (Workgroup):
This amendment clarifies that an E Occupancy classification is meant to be used for children physically or cognitively capable of responding to an emergency situation. The IBC Commentary, Volume 1 indicates that children less than 2 ½ years of age are generally incapable of responding to emergencies and therefore need to be placed in an occupancy with a higher level of protection (Group I-4).

Action Taken (Core Group):
305.2 will need modification to align with DSS requirements and state law.

[ ] Approved
[X] Returned for further Study/Clarification/Justification
[ ] Recommended for Next Code Adoption Cycle
[ ] Disapproved
[ ] Core Group Did Not Review (as of 01/09-11/06)

SECTION 308
INSTITUTIONAL GROUP I

308.1 Institutional Group I. Institutional Group I occupancy includes, among others, the use of a building or structure, or a portion thereof, in which people are cared for or live in a supervised environment, having physical limitations because of health or age are harbored for medical treatment or other care or treatment, or in which people are detained for penal or correctional purposes or in which the liberty of the occupants is restricted. Institutional occupancies shall be classified as Group I-1, I-2, I-3 or I-4.

308.2 Group I-1. This occupancy shall include buildings, structures or parts thereof housing ~~more than 16~~ persons, on a 24-hour basis, who because of age, mental disability or other reasons, live in a supervised residential environment that provides personal care services. ~~The occupants are capable of responding to an emergency situation without physical assistance from staff.~~

[For SFM] *This occupancy may contain more than six non-ambulatory and/or bedridden clients.* This group shall include, but not be limited to, the following:

Assisted living facilities *such as:* Residential ~~board and~~ Care Facilities, *Residential Care Facilities for the Elderly (RCFE's), Adult Residential Facilities,* Congregate ~~care~~ *Living Health* facilities, Group homes, *Residential Care Facilities for the Chronically Ill, and Congregate Living Health Facilities for the Terminally Ill).*

Social rehabilitation facilities *such as:* Halfway houses, *Community Correctional Centers, Community Correction Reentry Centers, Community Treatment Programs, Work Furlough Programs, and Alcoholism* ~~and~~ *or* drug *abuse recovery or treatment facilities* ~~centers)~~ .

~~Convalescent facilities~~ Verify I-2 group included these in I-2.

A facility such as the above with ~~five~~ *six* or fewer persons ~~shall~~ *may* be classified as a Group R-3 ~~or shall comply with the *International Residential Code* in accordance with Section 101.2~~. A facility such as above, housing ~~at least~~ *more than six* ~~and not more than 16~~ persons, ~~shall~~ *may* be classified as Group R-4.

Purpose and Rationale Statement (Workgroup):
This occupancy group is where the Task Group determined CBC R-2.1, 2.3 and 6.1 occupancies are best addressed by the majority of IBC model code language. This is to remain consistent with State Licensed Facilities. This is a threshold number utilized by Medicare vs. Medicaid which is not used in California where we use Medical. These represent present licensing categories in the CBC Group R- 2.1 and 2.3 occupancies. These represent present licensing categories in the CBC Group R- 6.1 occupancies. These clients are typically voluntary admission as opposed to court ordered in an Group I-2 Occupancy. This is in recognition of how these six or less facilities are classified presently. This is a new grouping recognizing the IBC Group R-4 occupancy. "May" was inserted in lieu of "shall" because of the variables in numbers of occupants with differing levels of ambulatory status and that "shall"could be viewed as an absolute.

Action Taken (Core Group):

[ ] Approved
[ ] Returned for further Study/Clarification/Justification
[ ] Recommended for Next Code Adoption Cycle
[ ] Disapproved
[ ] Core Group Did Not Review (as of 01/09-11/06)

308.5 Group I-4, day care facilities.
This group shall include buildings and structures occupied by persons of any age who receive custodial care for less than 24 hours by individuals other than parents or guardians, relatives by blood, marriage or adoption, and in a place other than the home of the person cared for. A facility such as the above with five or fewer persons shall be classified as a Group R-3. ~~or shall comply with the International Residential Code in accordance with Section 101.2~~ . Places of worship during religious functions are not included.

308.5.1 Adult care facility.
A facility that provides accommodations for less than 24 hours for more than five unrelated adults and provides supervision and personal care services shall be classified as Group I-4.
~~**Exception:** A facility where occupants are capable of responding to an emergency situation without physical assistance from the staff shall be classified as Group A-3.~~

Purpose and Rationale Statement (Workgroup):
Under current California Building Standards Code, licensed adult daycare facilities are generally classified as a Group E, Division 3 Occupancy (E-3). The Group A-3 occupancy classification provides substantially less fire and life safety protection that the CBC E-3 occupancy classification. This includes the requirement for a fire alarm at 50 occupants versus 300 occupants.

Action Taken (Core Group):

[ ] Approved
[ ] Returned for further Study/Clarification/Justification
[ ] Recommended for Next Code Adoption Cycle
[ ] Disapproved
[ ] Core Group Did Not Review (as of 01/09-11/06)

308.5.2 Child care facility.
A facility that provides supervision and personal care on less than a 24-hour basis for more than five children 2½ years of age or less shall be classified as Group I-4.
~~**Exception:** A child day care facility that provides care for more than five but no more than 100 children 2½ years or less of age, when the rooms where such children are cared for are located on the level of exit discharge and each of these child care rooms has an exit door directly to the exterior, shall be classified as Group E.~~

Purpose and Rationale Statement (Workgroup):
The IBC Commentary indicates that children less than 2 ½ years of age are generally incapable of responding to emergencies and therefore need to be placed in an occupancy with a higher level of protection (Group I-4). Current California Building Standards Code provides a higher level of protection including the requirement for two exits for 7 occupants versus two exits for 50 occupants.

Purpose and Rationale Statement (Workgroup):

Action Taken (Core Group):
Review for compliance with DSS regulations and State law.

[ ] Approved
[ ] Returned for further Study/Clarification/Justification
[ ] Recommended for Next Code Adoption Cycle
[ ] Disapproved
[ ] Core Group Did Not Review (as of 01/09-11/06)

SECTION 310
RESIDENTIAL GROUP R

310.1 Residential Group R. Residential Group R includes, among others, the use of a building or structure, or a portion thereof, for sleeping purposes when not classified as an Institutional Group I ~~or when not regulated by the International Residential Code in accordance with Section 101.2~~. Residential occupancies shall include the following:

R-3 Residential occupancies where the occupants are primarily permanent in nature and not classified as Group R-1, R-2, R-4 or I, including:

Buildings that do not contain more than two dwelling units.

Adult facilities that provide accommodations for five or fewer persons of any age for less than 24 hours.

Child care facilities that provide accommodations for five or fewer persons of any age for less than 24 hours.

Congregate living facilities with 16 or fewer persons.

~~Adult and child care facilities that are within a single-family home are permitted to comply with the *International Residential Code*.~~

[For SFM] This occupancy group may include facilities licensed by a governmental agency for a residentially based 24-hour care facility providing accommodations for six or fewer persons of any age. Occupants may be classified as ambulatory, nonambulatory or bedridden, (See Section 4XX Special Provisions For State Agency Licensed Facilities). This group may include:

Adult Day-care Facilities
Family Day-care Homes
Adult Day-support Center
Day-care Center for Mildly Ill Children

Infant Care Center and School Age Child Day-care Center
Adult Residential Facilities
Congregate Living Health Facilities
Foster Family Homes
Intermediate Care Facilities for the Developmentally Disabled Habilitative
Intermediate Care Facilities for the Developmentally Disabled Nursing
Nurseries for the full-time care of children under the age of six, but not including "infants" as defined in CFC Section 210
Residential Care Facilities for the Elderly
Small Family Homes and Residential Care Facilities for the Chronically Ill

Exception: [For SFM] Pursuant to Health and Safety Code Section 13143, facilities licensed by the Department of Social Services which provide nonmedical board, room and care for six or fewer ambulatory children or children two years of age or younger, and which do not have any nonambulatory clients shall not be subject to regulations pertaining to Group R, Division 2 Occupancies. With respect to these exempted facilities, no city, county, or public district shall adopt or enforce any requirement for the prevention of fire or for the protection of life and property against fire and panic unless the requirement would be applicable to a structure regardless of the special occupancy. Nothing shall restrict the application of state or local housing standards to such facilities if the standards are applicable to residential occupancies and are not based on the use of the structure as a facility for ambulatory children. For the purpose of this exception, ambulatory children does not include relatives of the licensee or the licensee's spouse.

Purpose and Rationale Statement (Workgroup):

This occupancy group is where the Task Group determined CBC R2.2.1, R2.1.1, R2.3.1, R6.1.1, and R6.2.1 occupancies are best addressed by the majority of IBC model code language. Tentatively removed based on the potential conflict with Intermediate Care facilities which would allow more than one bedridden client. Carry over of CBC 310.1.3.

Action Taken (Core Group):

[ ] Approved
[X] Returned for further Study/Clarification/Justification
[ ] Recommended for Next Code Adoption Cycle
[ ] Disapproved
[ ] Core Group Did Not Review (as of 01/09-11/06)

R-4 Residential occupancies shall include buildings arranged for occupancy as residential care/assisted living facilities including more than ~~five~~ *six* ~~but not more than 16~~ *ambulatory* ~~occupants~~ *clients*, excluding staff.

Group R-4 occupancies shall meet the requirements for construction as defined for Group R-3, except as otherwise provided for in this code~~, or shall comply with the *International Residential Code*~~.

[For SFM] *This occupancy classification may include a maximum six nonambulatory or bedridden clients. Group R-4 occupancies shall include the following:*

Assisted living facilities such as: Residential care facilities, Residential Care Facilities for the Elderly (RCFE's), Adult Residential Facilities, Congregate Living Health facilities, and Group homes.

Social rehabilitation facilities such as: Halfway houses (Community Correctional Centers, Community Correction Reentry Centers, Community Treatment Programs, Work Furlough Programs, and Alcoholism or drug abuse recovery or treatment facilities.

Purpose and Rationale Statement (Workgroup):

This occupancy group is where the Task Group determined CBC R2.2 and R6.2 occupancies are best addressed by the majority of IBC model code language. This provision covers CBC R-2.2 and R-6.2 occupancies that exceed 6 ambulatory clients.

Action Taken (Core Group):

[ ] Approved
[ ] Returned for further Study/Clarification/Justification
[ ] Recommended for Next Code Adoption Cycle
[ ] Disapproved
[ ] Core Group Did Not Review (as of 01/09-11/06)

310.2 Definitions. The following words and terms shall, for the purposes of this section and as used elsewhere in this code, have the meanings shown herein.

[For SFM] AGED HOME OR INSTITUTION *is a facility used for the housing of persons 65 years of age or older in need of care and supervision. (See definition of "care and supervision")*

[For SFM] BEDRIDDEN PERSON *means a person, requiring assistance in turning and repositioning in bed, or being unable to independently transfer to and from bed, except in facilities with appropriate and sufficient care staff, mechanical devices if necessary, and safety precautions as determined in Title 22 regulations, by the Director of Social Services or his or her designated representative.*

The Director of Social Services or his or her designated representative shall make the determination of the bedridden status of persons with developmental disabilities, in consultation with the Director of Developmental Services or his or her designated representative.

The Director of Social Services or his or her designated representative shall make the determination of the bedridden status of all other persons with disabilities who are not developmentally disabled.

[For SFM] CARE AND SUPERVISION *means any one or more of the following activities provided by a person or facility to meet the needs of the clients:*

Assistance in dressing, grooming, bathing and other personal hygiene.
Assistance with taking medication.

Central storing and/or distribution of medications.
Arrangement of and assistance with medical and dental care.
Maintenance of house rules for the protection of clients.
Supervision of client schedules and activities.
Maintenance and/or supervision of client cash resources or property.
Monitoring food intake or special diets.
Providing basic services required by applicable law and regulation to be provided by the licensee in order to obtain and maintain a community-care facility license.

[For SFM] CATASTROPHICALLY INJURED, *as termed, means a person whose origin of disability was acquired through trauma or nondegenerative neurologic illness, for whom it has been determined by the Department of Health Services Certification and Licensing that active rehabilitation would be beneficial.*

[For SFM] CHILD-CARE CENTER *is any facility of any capacity other than a large or small family day-care home as defined in these regulations in which less than 24-hour-per-day nonmedical supervision is provided for children in a group setting.*

[For SFM] CHILD OR CHILDREN *is a person or persons under the age of 18 years.*

[For SFM] CHRONICALLY ILL. *See "Terminally ill."*

[For SFM] CONGREGATE LIVING HEALTH FACILITY (CLHF), *as termed, is a residential home with a capacity of no more than six beds, which provides inpatient care, including the following basic services: medical supervision, 24-hour skilled nursing and supportive care, pharmacy, dietary, social recreational, and at least provides services for persons who are diagnosed with a terminal illness or who are catastrophically and severely disabled.*

[For SFM] CONGREGATE RESIDENCE *is any building or portion thereof that contains facilities for living, sleeping and sanitation, as required by this code, and may include facilities for eating and cooking, for occupancy by other than a family. A congregate residence may be a shelter, convent, monastery, dormitory, fraternity or sorority house, but does not include jails, hospitals, nursing homes, hotels or lodging houses.*

[For SFM] FULL-TIME CARE *shall mean the establishment and routine care of persons on an hourly, daily, weekly, monthly, yearly or permanent basis, whether for 24 hours per day or less, and where sleeping accommodations are provided.*

[For SFM] INFANT, *for the purpose of these regulations, shall mean any child who because of age only, is unable to walk and requires the aid of another person to evacuate the building. In no case shall the term "infant" mean a child beyond two years of age.*

[For SFM] MENTALLY RETARDED PERSONS, PROFOUNDLY OR SEVERELY, *shall mean any retarded person who is unable to evacuate a building unassisted during emergency conditions.*

> ***NOTE:*** *The determination as to such incapacity shall be made by the director of the State Department of Public Health or his designated representative pursuant to Health and Safety Code Section 13131.3.*

[For SFM] NONAMBULATORY PERSONS *are persons unable to leave a building unassisted under emergency conditions. It includes, but is not limited to, persons who depend on mechanical aids such as crutches, walkers and wheelchairs and any person who is unable to physically and mentally respond to a sensory signal approved by the state fire marshal or an oral instruction relating to fire danger.*

The determination of ambulatory or nonambulatory status of persons with developmental disabilities shall be made by the director of Social Services or his or her designated representative, in consultation with the director of Developmental Services or his or her designated representative. The determination of ambulatory or nonambulatory status of all other disabled persons placed after January 1, 1984, who are not developmentally disabled shall be made by the director of Social Services or his or her designated representative.

~~**PERSONAL CARE SERVICE.** The care of residents who do not require chronic or convalescent medical or nursing care. Personal care involves responsibility for the safety of the resident while inside the building.~~

~~**RESIDENTIAL CARE/ASSISTED LIVING FACILITIES.** A building or part thereof housing persons, on a 24-hour basis, who because of age, mental disability or other reasons, live in a supervised residential environment which provides personal care services. The occupants are capable of responding to an emergency situation without physical assistance from staff. This classification shall include, but not be limited to, the following: residential board and care facilities, assisted living facilities, halfway houses, group homes, congregate care facilities, social rehabilitation facilities, alcohol and drug abuse centers and convalescent facilities.~~

[For SFM] RESIDENTIAL CARE FACILITY FOR THE CHRONICALLY ILL (RCF/CI), *as termed, means a housing arrangement with a maximum capacity of 25 residents that provides a range of services to residents who have chronic, life-threatening illnesses.*

[For SFM] RESIDENTIAL CARE FACILITY FOR THE ELDERLY (RCFE), *as defined in Health and Safety Code Section 1569.2, shall mean a facility with a housing arrangement chosen voluntarily by persons 60 years of age or over, or their authorized representative, where varying levels and intensities of care and supervision, protective supervision or personal care are provided, based on their varying needs, as determined in order to be admitted and to remain in the facility. Persons under 60 years of age with compatible needs, as determined by the Department of Social Services in regulations, may be allowed to be admitted or retained in a residential-care facility for the elderly.*

[For SFM] *Pursuant to Health and Safety Code Section 13133, regulations of the state fire marshal pertaining to Group R, Division 2 Occupancies classified as Residential Facilities (RF) and Residential-care Facilities for the Elderly (RCFE)shall apply uniformly throughout the state and no city, county, city and county, including a charter city or charter county, or fire protection district shall adopt or enforce any ordinance or local rule or regulation relating to fire and panic safety which is in consistent with these regulations. A city, county, city and county, including a charter city or charter county may pursuant to Health and Safety Code Section 13143.5, or a fire protection district*

may pursuant to Health and Safety Code Section 13869.7, adopt standards more stringent than those adopted by the state fire marshal that are reasonably necessary to accommodate local climate, geological, or topographical conditions relating to roof coverings for Residential-care Facilities for the Elderly.

[For SFM] RESIDENTIAL FACILITY (RF), *as defined in Section 1502 of the Health and Safety Code, shall mean any family home, group care facility, or similar facility determined by the director of Social Services, for 24-hour nonmedical care of persons in need of personal services, supervision, or assistance essential for sustaining the activities of daily living or for the protection of the individual. Such facilities include small family homes and social rehabilitation facilities.*

[For SFM] *Pursuant to Health and Safety Code Section 13133, regulations of the state fire marshal pertaining to Group R, Division 2 Occupancies classified as Residential Facilities (RF) and Residential-care Facilities for the Elderly (RCFE)shall apply uniformly throughout the state and no city, county, city and county, including a charter city or charter county, or fire protection district shall adopt or enforce any ordinance or local rule or regulation relating to fire and panic safety which is in consistent with these regulations. A city, county, city and county, including a charter city or charter county may pursuant to Health and Safety Code Section 13143.5, or a fire protection district may pursuant to Health and Safety Code Section 13869.7, adopt standards more stringent than those adopted by the state fire marshal that are reasonably necessary to accommodate local climate, geological, or topographical conditions relating to roof coverings for Residential-care Facilities for the Elderly.*

[For SFM] RESTRAINT *shall mean the physical retention of a person within a room, cell or cell block by any means, or within the exterior walls of a building by means of locked doors inoperable by the person restrained. Restraint shall also mean the physical binding, strapping or similar restriction of any person in a chair, walker, bed or other contrivance for the purpose of deliberately restricting the free movement of ambulatory persons.*

Restraint shall not be construed to include nonambulatory persons nor shall it include the use of bandage material, strip sheeting or other fabrics or materials (soft ties) used to restrain persons in hospital-type beds or wheelchairs to prevent injury, provided an approved method of quick release is maintained. Facilities employing the use of soft ties, however, shall be classified as a building used to house nonambulatory persons.

Restraint shall not be practiced in licensed facilities classified as Group I-1, R-3 and R-4 occupancies unless constructed as a Group I-3 occupancy.

[For SFM] TERMINALLY ILL, *as termed for an individual, means the individual has a life expectancy of six months or less as stated in writing by his or her attending physician and surgeon.*

Purpose and Rationale Statement (Workgroup):
Proposed inclusion of definitions some of which may need to be located to other sections of this code. Recommend omitting struck out definitions in lieu use of current CBC definition and use of nonambulatory designation. Carry over CBC 310.1.4 as applicable

to RCFE facilities. Carry over of CBC 310.1.4 as applicable to RF facilities. This proposal identifies CBC 310.1.2 not permitting restraint in Group R2 occupancies.

Action Taken (Core Group):

[ ] Approved
[ ] Returned for further Study/Clarification/Justification
[ ] Recommended for Next Code Adoption Cycle
[ ] Disapproved
[ ] Core Group Did Not Review (as of 01/09-11/06)

Section 310.1 Residential Group R.
R-3 Residential occupancies where the occupants are primarily permanent in nature and not classified as R-1, R-2, R-4, or I and where buildings do not contain more than two dwelling units as applicable in Section 101.2~~,~~.~~or adult and child care facilities that provide accommodations for five or fewer persons of any age for less than 24 hours.~~ *This division includes dwellings used for large family day-care homes (as defined in Chapter 4 Section 419). Licensing categories that may use this classification include, but are not limited to: Adult Day-care facilities, Family Day-Care Homes, Adult Day-support Center, Day Care- Center for Mildly III Children, Infant Care Center and School Age Day-Care Center.* Adult and childcare facilities that are within a single family home are permitted to comply with the *International Residential Code* in accordance with Section 101.2

Purpose and Rationale Statement (Workgroup):
(SFM) This amended language is necessary in order to include uses and facilities and their occupancy groups that are statutory and currently exist in the 2001 California Building Code, and part of State regulated facilities that are usually licensed by Department of Social Services. Please note that this author had no access to the likely amended section by HCD as this state agency regulates these facilities as well. SFM core group is advised to look into HCD express terms package for coloration of this Section. In addition, the R-2 ‘s work group has produced an amended language of R-3 groups that differs from this amended section and a discussion between both groups is advised in order to reach a consensus.

Action Taken (Core Group):

[ ] Approved
[ ] Returned for further Study/Clarification/Justification
[ ] Recommended for Next Code Adoption Cycle
[ ] Disapproved
[X] Core Group Did Not Review (as of 01/09-11/06)

Chapter 4 – Special Detailed Requirements Based on Use and Occupancy

Special Hazards. Devices generating a glow, spark or flame capable of igniting flammable vapors shall be installed such that sources of ignition are at least 18 inches above the floor of any room in which Class I flammable liquids or flammable gases are used or stored.

Purpose and Rationale Statement (Workgroup):

Action Taken (Core Group):
The Core Group is recommending not carrying this provision forward as it is covered in the UMC.

[ ] Approved
[ ] Returned for further Study/Clarification/Justification
[ ] Recommended for Next Code Adoption Cycle
[X] Disapproved
[ ] Core Group Did Not Review (as of 01/09-11/06)

Establish new section in Chapter 4—Special Detailed Requirements Based on Use and Occupancy for Group E Occupancies and a new sub-section—Location on Property within this Section

4XX.XX Location on Property. All buildings housing Group E Occupancies shall front directly on a public street or an exit discharge not less than 20 feet (6096 mm) in width. The exit discharge to the public street shall be a minimum 20-foot-wide (6096 mm) right-of-way, unobstructed and maintained only as access to the public street. At least one required exit shall be located on the public street or on the exit discharge.

Purpose and Rationale Statement (Workgroup):
A 20-foot wide public street or exit discharge is required for both emergency access and occupant egress. It is proposed to add language from CBC Section 305.3 is proposed to a new sub-section in Chapter 4 (Special Detailed Requirements Based on Use and Occupancy).

The creation of a Section (Group E Occupancies) and sub-section (Location on Property) is consistent with Section 406.3.7—Location on property: motor-vehicle-related occupancies; and 415.3—Location on property: Groups H-1 through H-5.

Action Taken (Core Group):
Use the other file for this code change proposal.

[ ] Approved
[X] Returned for further Study/Clarification/Justification
[ ] Recommended for Next Code Adoption Cycle
[ ] Disapproved
[ ] Core Group Did Not Review (as of 01/09-11/06)

4XX.XX. Access and Means of Egress.

1. Locations of Group E Occupancies on property shall comply with Section 4XX.XX.
2. Access to, and egress from, buildings required to be accessible shall be provided as specified in Chapter 11.
3. Means of egress shall be as provided in Chapter 10. (See Section 1014.X for laboratories, vocational shops and areas of similar hazards and Section 1014.6 for stages).

Purpose and Rationale Statement (Workgroup):
Subsection will provide guidance to special access and egress issues related to E and I-4 Occupancies.

Creation of sub-section is consistent with 406.3.8 Means of egress: Motor-vehicle related occupancies 408.3 Means of egress: Group I-3.

Action Taken (Core Group):
Not needed based upon charging statements in the beginning of Chapter 4

[ ] Approved
[X] Returned for further Study/Clarification/Justification
[ ] Recommended for Next Code Adoption Cycle
[X] Disapproved
[ ] Core Group Did Not Review (as of 01/09-11/06)

410.3.4 Proscenium wall. Where the stage height is greater than 50 feet (15 240 mm), all portions of the stage shall be completely separated from the seating area by a proscenium wall with not less than a 2-hour fire-resistance rating extending continuously from the foundation to the roof.

Where the stage height is 50 feet (15 240 mm) or less, the stage area shall be separated from accessory spaces by a one-hour fire-restive occupancy separation.

Exception: Control rooms and follow spot rooms may be open to the audience.

Purpose and Rationale Statement (Workgroup):
Separation of stage from accessory spaces in CBC Section 405.3.1 is more restrictive than that found in IBC 410.3.4 for stage heights 50 feet or less, therefore language carry-over from CBC to IBC is proposed as noted above.

Action Taken (Core Group):
Revise the justification so that it does not rely upon “that’s how we’ve always done it”

[ ] Approved
[X] Returned for further Study/Clarification/Justification

[ ] Recommended for Next Code Adoption Cycle
[X] Disapproved
[ ] Core Group Did Not Review (as of 01/09-11/06)

Chapter 5 – General Building Height and Area

504.2 Automatic sprinkler system increase. Where a building is equipped throughout with an approved automatic sprinkler system in accordance with Section 903.3.1.1, ~~the value specified in Table 503 for maximum height is increased by 20 feet (6096mm) and~~ the maximum number of stories is increased by one story. ~~These increases are permitted in addition to the area increase in accordance with Sections 506.2 and 506.3. For Group R buildings equipped throughout with an approved automatic sprinkler system in accordance with Section 903.3.1.2, the value specified in Table 503 for maximum height is increased by 20 feet (6096mm) and the maximum number of stories is increased by one story, but shall not exceed four stories or 60 feet (18 288 mm), respectively.~~

Exceptions:

1. Group I-2 of Type IIB, III, IV or V construction.
2. Group H-1, H-2, H-3 or H-5.
3. Fire-resistance rating substitution in accordance with Table 601, Note d.
4. This increase is not permitted in addition to the area increase in accordance with Section 506.3.

Purpose and Rationale Statement (Workgroup):

Action Taken (Core Group):
The Core Group felt that this issue would best be served if reviewed and a recommendation of a more global resolution is defined by the Height and Area Workgroup is brought forward.

[ ] Approved
[X] Returned for further Study/Clarification/Justification
[ ] Recommended for Next Code Adoption Cycle
[ ] Disapproved
[ ] Core Group Did Not Review (as of 01/09-11/06)

506.3 Automatic sprinkler system increase. Where a building is protected throughout with an approved automatic sprinkler system in accordance with Section 903.3.1.1, the area limitation in Table 503 is permitted to be increased by an additional ~~200~~*100* percent (I_s = ~~200~~*100* percent) for multistory buildings and an additional ~~300~~*200* percent (I_s = ~~300~~*200* percent) for single-story buildings. ~~These increases are permitted in addition to the height and story increases in accordance with Section 504.2.~~

Exceptions:

1. Buildings with an occupancy in Group H-1, H-2 or H-3.

2. Fire-resistance rating substitution in accordance with Table 601, Note d.

3. These increases are not permitted in addition to the story increases in accordance with Section 504.2.

Purpose and Rationale Statement (Workgroup):

Action Taken (Core Group):
The Core Group felt that this issue would best be served if reviewed and a recommendation of a more global resolution is defined by the Height and Area Workgroup is brought forward.

[ ] Approved
[X] Returned for further Study/Clarification/Justification
[ ] Recommended for Next Code Adoption Cycle
[ ] Disapproved
[ ] Core Group Did Not Review (as of 01/09-11/06)

506.4 Area determination. The maximum area of a building with more than one story shall be determined by multiplying the allowable area of the first floor (A_a), as determined in Section 506.1, ~~by the number of stories~~ as listed below.

1. For ~~two~~ multistory buildings, multiply by 2;
2. ~~For three-story or higher buildings, multiply by 3; and,~~
3. No story shall exceed the allowable area per floor (A_a), as determined in Section 506.1 for the occupancies on that floor.

Exceptions:

1. Unlimited area buildings in accordance with Section 507.
2. ~~The maximum area of a building equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.2 shall be determined by multiplying the allowable area per floor (A_a), as determined in Section 506.1 by the number of stories.~~

Purpose and Rationale Statement (Workgroup):

Action Taken (Core Group):
The Core Group felt that this issue would best be served if reviewed and a recommendation of a more global resolution is defined by the Height and Area Workgroup is brought forward.

[ ] Approved
[X] Returned for further Study/Clarification/Justification
[ ] Recommended for Next Code Adoption Cycle
[ ] Disapproved
[ ] Core Group Did Not Review (as of 01/09-11/06)

Chapter 6 – Types of Construction

Chapter 7 – Fire Resistance-Rated Construction

707.14.1 Elevator lobby. An elevator lobby shall be provided at each floor where an elevator shaft enclosure connects more than three stories. The lobby shall separate the elevator shaft enclosure doors from each floor by fire partitions equal to the fire-resistance rating of the corridor and the required opening protection. Elevator lobbies shall have at least one means of egress complying with Chapter 10 and other provisions within this code.

Exceptions:

1. Enclosed elevator lobbies are not required at the street floor, provided the entire street floor is equipped with an automatic sprinkler system in accordance with Section 903.3.1.1.
2. Elevators not required to be located in a shaft in accordance with Section 707.2 are not required to have enclosed elevator lobbies.
3. Where additional doors are provided at the hoistway opening in accordance with Section 3002.6. Such doors shall be tested in accordance with UL 1784 without an artificial bottom seal.
4. In other than Group I-3, and buildings having occupied floors located more than 75 feet (22 860 mm) above the lowest level of fire department vehicle access, enclosed elevator lobbies are not required where the building is protected by an automatic sprinkler system installed in accordance with Section 903.3.1.1 or 903.3.1.2.
5. Smoke partitions shall be permitted in lieu of fire partitions to separate the elevator lobby at each floor where the building is equipped throughout with an automatic sprinkler system installed in accordance with Section 903.3.1.1 or 903.3.1.2.
6. *When approved*, ~~e~~Enclosed elevator lobbies are not required where the elevator hoistway is pressurized in accordance with Section 707.14.2.

Purpose and Rationale Statement (Workgroup):
(N) The proposed code amendment requires approval by the Building Official in order to apply this exception.

The concept that hoistway pressurization provides an equivalent level of protection to that of an enclosed elevator lobby is contrary to existing building practices established in the State of California. The enclosed elevator lobby has proven to be a reliable system to prevent smoke migration throughout the building via the elevator hoistway. Installation of an elevator lobby provides a reliable physical barrier that is not reliant on the performance of mechanical systems.

Action Taken (Core Group):

[ ] Approved
[X] Returned for further Study/Clarification/Justification
[ ] Recommended for Next Code Adoption Cycle

[ ] Disapproved
[X] Core Group Did Not Review (as of 01/09-11/06)

716.5.2 Fire barriers. Duct and air transfer openings of fire barriers shall be protected with approved fire *and smoke* dampers installed in accordance with their listing.

Exceptions:

1. Fire dampers are not required at penetrations of fire barriers where ~~any of the following apply~~ *the*

~~1.~~ penetrations are tested in accordance with ASTM E119 as part of the fire-resistance-rated assembly.

2. *Fire and smoke dampers are not required where* ducts are used as part of an approved smoke control system in accordance with Section 909 and where the use of a fire *or smoke* damper would interfere with the operation of the smoke control system.

3. Such walls are penetrated by ducted HVAC systems, have a required fire-resistance rating of 1 hour or less, are in areas of other than Group H and are in buildings equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1 or 903.3.1.2. For the purposes of this exception, a ducted HVAC system shall be a duct system for conveying supply, return or exhaust air as part of the structure's HVAC system. Such a duct system shall be constructed of sheet steel not less than 26 gage thickness and shall be continuous from the air-handling appliance or equipment to the air outlet and inlet terminals.

Purpose and Rationale Statement (Workgroup):

(N) The addition of smoke dampers maintains the current level of protection provided under the UBC. UBC Section 713.10 requires smoke dampers in occupancy separations, horizontal exit walls, and shaft enclosures which are considered to be fire barriers in accordance with Section 706 of the IBC.

Since this Work Group does not have responsibility for specific occupancies, we are distributing this proposed amendment to the other Work Groups that do so they may consider it as it may apply to occupancy separations involving their particular occupancies.

It should also be noted that this proposed amendment would also apply to exit passageways, vertical exit enclosures, incidental use areas, and single occupancy fire areas based on IBC Section 706 Fire Barriers.

Exception 3
Elimination of this exception maintains the current level of protection as provided under the UBC. This deletion would be consistent with the use of, and exceptions to use of, fire dampers in UBC Section 713.11 since Exception 3 to Section 716.5.2 for the requirements for fire dampers does not exist in the current UBC Section 713.11.

Action Taken (Core Group):

[ ] Approved
[ ] Returned for further Study/Clarification/Justification
[ ] Recommended for Next Code Adoption Cycle
[ ] Disapproved
[X] Core Group Did Not Review (as of 01/09-11/06)

Chapter 8 – Interior Finishes

Chapter 9 – Fire Protection Systems

[F] 903.2.2 Group E. An automatic sprinkler system shall be provided for Group E occupancies as follows:

1. Throughout all Group E fire areas greater than 20,000 square feet (1858 m2) in area.
2. Throughout every portion of educational buildings below the level of exit discharge.

   Exception: An automatic sprinkler system is not required in any fire area or area below the level of exit discharge where every classroom throughout the building has at least one exterior exit door at ground level.
3. In rooms or areas with special hazards such as laboratories, vocational shops and other such areas where hazardous materials in exempt amounts is frequently used.

Purpose and Rationale Statement (Workgroup):

In buildings containing Group E Occupancies the CBC requirements are as follows:

[CBC 305.2.4] All laboratories, vocational shops and similar areas containing hazardous materials are required to be separated from each other and from other portions of the building by not less than a one-hour fire-resistive occupancy separation.

[CBC 904.2.4.1] All buildings throughout are required to be sprinklered.

To keep with the same level of protection in the CBC, at least in the areas of special hazards, modifications are proposed in Table 302.1.1—Incidental Use Areas and in [F] 903.2.2 Group E as shown above.

Action Taken (Core Group):
Not reviewed, will wait for the latest version.

[ ] Approved
[ ] Returned for further Study/Clarification/Justification
[ ] Recommended for Next Code Adoption Cycle
[ ] Disapproved
[X] Core Group Did Not Review (as of 01/09-11/06)

[F] 907.2.12.1 Automatic fire detection. Smoke detectors shall be provided in accordance with this section. Smoke detectors shall be connected to an automatic fire alarm system. The activation of any detector required by this section shall operate the emergency voice/alarm communication system. Smoke detectors shall be located as follows:

1. In each mechanical equipment, electrical, transformer, telephone equipment or similar room which is not provided with sprinkler protection, elevator machine rooms and in elevator lobbies.
2. In the main return air and exhaust air plenum of each air-conditioning system having a capacity greater than 2,000 cubic feet per minute (cfm) (0.94 m^3/s). Such detectors shall be located in a serviceable area downstream of the last duct inlet.
3. At each connection to a vertical duct or riser serving two or more stories from a return air duct or plenum of an air-conditioning system. In Group R-1 and R-2 occupancies a listed smoke detector is allowed to be used in each return air riser carrying not more than 5,000 cfm (2.4 m^3/s) and serving not more than 10 air inlet openings.
4. For Group R, Division 1 Occupancies in all interior corridors serving as a means of egress for an occupied load of 10 or more.

Purpose and Rationale Statement (Workgroup):
(SFM) This requirement of Section 403.3 of CBC has not been addressed by the IBC and needs to be carried forward.

Action Taken (Core Group):

[ ] Approved
[ ] Returned for further Study/Clarification/Justification
[ ] Recommended for Next Code Adoption Cycle
[ ] Disapproved
[ ] Core Group Did Not Review (as of 01/09-11/06)

Chapter 10 – Means of Egress

PHOTOLUMINESCENT see section 1002.

SELF-LUMINOUS see section 1002.

SECTION 1002

PHOTOLUMINESCENT is the property of emitting light as the result of absorption of visible light, which continues for a length time after excitation.

SELF-LUMINOUS means powered continuously by a self-contained power source other than a battery or batteries, such as radioactive tritium gas. A self-luminuous sign is independent of external power supplies or other energy for its operation.

Purpose and Rationale Statement (Workgroup):
These terms which are used in the following recommended amendments are not defined in the codes.

Action Taken (Core Group):

[ ] Approved
[ ] Returned for further Study/Clarification/Justification
[ ] Recommended for Next Code Adoption Cycle
[ ] Disapproved
[X] Core Group Did Not Review (as of 01/09-11/06)

1011.6 Floor-level exit signs. Where exit signs are required by Section 1011.1, additional approved low-level exit signs which are internally or externally illuminated, photoluminescent or self-luminous, shall be provided in all interior corridors of Group I and in all interior corridors serving guest rooms of hotels in Group R, Division 1 occupancies.

Exceptions:

1.Group I occupancies which are provided with smoke barriers constructed in accordance with Section 407.4

2. Group I, Division 3 occupancies.

The bottom of the sign shall not be less than 6 inches (152 mm) or more than 8 inches (203 mm) above the floor level and shall indicate the path of exit travel. For exit and exit access doors, the sign shall be on the door or adjacent to the door with the closest edge of the sign or marker within 4 inches (102 mm) of the door frame.

Note: Pursuant to Health and Safety Code Section 13143, this California amendment applies to all newly constructed buildings or structures subject to this section for which a building permit is issued (or construction commenced, where no building permit is issued) on or after January 1, 1989.

1011.6.2. (1007.6.2.1.1, 2001 CBC) Path Marking. When exit signs are required by Chapter 10, in addition to approved floor-level exit signs, approved path marking shall be installed at floor level or no higher that 8 inches (203 mm) above the floor level in all interior rated exit corridors of unsprinklered Group R, Division 1 and Division 2 Occupancies. Such marking shall be continuous except as interrupted by door-ways, corridors or other such architectural features in order to provide a visible delineation along the path of travel.

NOTE: Pursuant to Health and Safety Code Section 13143, the California amendments of this section shall apply to all newly constructed buildings or structures

subject to this section for which a building permit is issued (or construction commenced, where no building permit is issued) on or after January 1, 1989.

Purpose and Rationale Statement (Workgroup):

(SFM) The specific requirement is not statutory. The mandate is to have regulations addressing floor level exit signs and path markings. Health and Safety Code 13143

Group recommended language is italicized additions to code language draft taken from the eSolutions web site and added R 1's and R2's.

Action Taken (Core Group):

[ ] Approved
[ ] Returned for further Study/Clarification/Justification
[ ] Recommended for Next Code Adoption Cycle
[ ] Disapproved
[X] Core Group Did Not Review (as of 01/09-11/06)

SECTION 1014
EXITS AND EXIT ACCESS DOORWAYS

Provide for a minimum of two exits for laboratories, vocational shops and similar areas having a floor area of 200 square feet or more where special hazards exist. Also limit maximum travel distance to an exit or exit access door to a maximum 75 feet. (CBC 1007.3.8) (Item 11) (Alternate new section in Chapter 4 for Group E and I-4 Occupancies)—

1014.1 Exit or exit access doorways required. Two exits or exit access doorways from any space shall be provided where one of the following conditions exists:

4. The occupant load of the space exceeds the values in Table 1014.1.

5. The common path of egress travel exceeds the limitations of Section 1013.3.

6. Where required by Sections 1014.3, 1014.4, ~~and~~ 1014.5 and 1014.X.

Exception: Group I-2 occupancies shall comply with Section 1013.2.2.

TABLE 1014.1 SPACES WITH ONE MEANS OF EGRESS	
OCCUPANCY	**MAXIMUM OCCUPANT LOAD**
A, B, E[1], F, M, U	50
H-1, H-2, H-3	3
H-4, H-5, I-1, I-3, I-4, R	10
S	30

1. For special hazardous areas such as laboratories and vocation shops and similar areas, see Section 1014.X

1014.X Special hazardous areas not classified as H Occupancies in Group E Occupancies. Laboratories, vocational shops and other areas with similar hazards having a floor area of 200 square feet (18.6 m^2) or more shall have access to not less than two separate exits or exit-access doorways. All portions of such laboratories shall be within 75 feet (22 860 mm) of an exit or exit access door.

Purpose and Rationale Statement (Workgroup):
Modifications to Sections 1014.1 and Table 1014.1 are proposed to reference new section 1014.X ('X' being number to be selected by Core committee) which provides for a minimum of two exits and a maximum travel distance of 75 feet to an exit or exit access in areas with special hazards that are 200 square feet or more.

This requirement is consistent with CBC Section 1007.3.8.

Action Taken (Core Group):
Revise justification to not rely upon CBC See 1013.3 for common path of exit travel.

[ ] Approved
[X] Returned for further Study/Clarification/Justification
[ ] Recommended for Next Code Adoption Cycle
[ ] Disapproved
[ ] Core Group Did Not Review (as of 01/09-11/06)

1026.1 General. In addition to the means of egress required by this chapter, provisions shall be made for emergency escape and rescue in Group R and I-1 occupancies. Basements and sleeping rooms below the fourth story above grade plane shall have at least one exterior emergency escape and rescue opening in accordance with this section. Where basements contain one or more sleeping rooms, emergency egress and rescue openings shall be required in each sleeping room, but shall not be required in adjoining areas of the basement. Such openings shall open directly into a public way or to a yard or court that opens to a public way.

Exceptions:

1. In other than Group R-3 occupancies, buildings equipped throughout with an approved automatic sprinkler system in accordance with Section 903.3.1.1 or 903.3.1.2.
2. In other than Group R-3 occupancies, sleeping rooms provided with a door to a fire-resistance-rated corridor having access to two remote exits in opposite directions.
3. The emergency escape and rescue opening is permitted to open onto a balcony within an atrium in accordance with the requirements of Section 404, provided the balcony provides access to an exit and the dwelling unit or sleeping unit has a means of egress that is not open to the atrium.

4. Basements with a ceiling height of less than 80 inches (2032 mm) shall not be required to have emergency escape and rescue windows.
5. High-rise buildings in accordance with Section 403.
6. Emergency escape and rescue openings are not required from basements or sleeping rooms that have an exit door or exit access door that opens directly into a public way or to a yard, court or exterior exit balcony that opens to a public way.
7. Basements without habitable spaces and having no more than 200 square feet (18.6 m^2) in floor area shall not be required to have emergency escape windows.

1026.2 Minimum size. Emergency escape and rescue openings shall have a minimum net clear opening of 5.7 square feet (0.53 m^2).

Exception: The minimum net clear opening for emergency escape and rescue grade-floor openings shall be 5 square feet (0.46 m^2).

1026.2.1 Minimum dimensions. The minimum net clear opening height dimension shall be 24 inches (610 mm). The minimum net clear opening width dimension shall be 20 inches (508 mm). The net clear opening dimensions shall be the result of normal operation of the opening.

1026.3 Maximum height from floor. Emergency escape and rescue openings shall have the bottom of the clear opening not greater than 44 inches (1118 mm) measured from the floor.

1026.4 Operational constraints. Emergency escape and rescue openings and any exit doors shall be maintained free of any obstructions other than those allowed by this section and shall be operational from the inside of the room ~~without the use of keys or tools~~. Bars, grilles, grates or similar devices are permitted to be placed over emergency escape and rescue openings provided the minimum net clear opening size complies with Section 1026.2 and such devices shall be releasable or removable from the inside without the use of a key, tool, special knowledge or effort or force greater than that which is required for normal operation of the escape and rescue opening. Where such bars, grilles, grates or similar devices are installed ~~in existing buildings~~, smoke alarms shall be installed in accordance with Sections 907.2.10 regardless of the valuation of the alteration. The release mechanism shall be maintained operable at all times.

Such bars, grills, grates or any similar devices shall be equipped with an approved exterior release device for use by the fire department only when required by the authority having jurisdiction.

When security bars (burglar bars) are installed on emergency escape and rescue openings and doors, such devices shall comply with the California Building Code Standard XXXXX.

Group R Division 1 occupancies provided with a monitored fire sprinkler system is accordance with section 903.2.7 and designed in accordance with NFPA 13 may have openable windows permanently restricted to a maximum 4-inch (102mm) open position.

Purpose/Rationale:

(SFM) Bars, grills, grates and similar devices used for security purposes have contributed to many fire deaths and injuries. When used on emergency escape and rescue opening and doors, these devices can greatly slowdown or prevent the victims of residential emergencies from exiting the building. Because of this, it is very important that we maintain these existing amendments to the California Building Code, see section 310.4, in regards to bars, grills, grates or similar devices.

Chapter 11 – Accessibility

Chapter 12 – Interior Environment

1203.5 Other ventilation and exhaust systems. Ventilation and exhaust systems for occupancies and operations involving flammable or combustible hazards or other contaminant sources as covered in the ~~International~~ California Mechanical Code or the ~~International~~ California Fire Code shall be provided as required by both codes.

1203.5.1 Exhaust Ventilation. In all buildings or portions thereof where Class I and II liquids are used, a mechanically operated exhaust ventilation system shall be provided sufficient to produce six air changes per hour. Such exhaust ventilation shall be taken from a point at or near the floor level.

Purpose and Rationale Statement (Workgroup):

Action Taken (Core Group):
The Core Group suggested this item be re-reviewed.

[ ] Approved
[X] Returned for further Study/Clarification/Justification
[ ] Recommended for Next Code Adoption Cycle
[ ] Disapproved
[ ] Core Group Did Not Review (as of 01/09-11/06)

Chapter 13 – Energy Efficiency
Chapter 14 – Exterior Walls
Chapter 15 – Roof Assembles and Rooftop Structures
Chapter 16 – Structural Design
Chapter 17 – Structural Tests and Special Inspections
Chapter 18 – Soils and Foundations
Chapter 19 – Concrete
Chapter 20 – Aluminum

Chapter 21 – Masonry
Chapter 22 – Steel
Chapter 23 – Wood
Chapter 24 – Glass and Glazing
Chapter 25 – Gypsum Board and Plaster
Chapter 26 – Plastic
Chapter 27 – Electrical
Chapter 28 – Mechanical Systems
Chapter 29 – Plumbing Systems
Chapter 30 – Elevators and Conveying Systems
Chapter 31 – Special Construction
Chapter 32 – Encroachment Into The Public Way
Chapter 33 – Safeguards During Construction
Chapter 34 – Existing Structures

Chapter 35 – Referenced Standards

ACRONYM = NFPA

Standard reference number	Title	Referenced in code section number
11—98	Low Expansion Foam	904.7
11A—99	Medium- and High-expansion Foam Systems	904.7
12—00	Carbon Dioxide Extinguishing Systems	904.8, 904.11
12A—04	Halon 1301 Fire Extinguishing Systems	904.9
13—02	Installation of Sprinkler Systems	704.12, 707.2, 903.3.1.1, 903.3.2, 903.3.5.1.1, 904.11, 907.8, 3104.5, 3104.9

Amendments to NFPA 13 2002 edition

Add a sentence to the beginning of Section 9.3.5.8.9 as follows:
Where pipe is used for sway bracing, it shall have a wall thickness of not less than Schedule 40.

Replace Section 9.3.5.9.4 as follows:
Lag screws or power-driven fasteners shall not be used to attach braces to the building structure.

13D—02	Installation of Sprinkler Systems in One- and Two-family Dwellings and Manufactured Homes	903.1.2, 903.3.1.3, 903.3.5.1.1
13R—02	Installation of Sprinkler Systems in Residential Occupancies Up to and Including Four Stories in Height	903.1.2, 903.3.1.2,

		903.3.5.1.1, 903.3.5.1.2, 903.4
14—03	Installation of Standpipe and Hose System	905.2, 905.3.4, 905.4.2, 905.8
16—03	Installation Foam-Water Sprinkler and Foam-Water Spray Systems	904.7, 904.11
17—02	Dry Chemical Extinguishing Systems	904.6, 904.11
17A—98	Wet Chemical Extinguishing Systems	904.5, 904.11
30—03	Flammable and Combustible Liquids Code	415.3
31—01	Installation of Oil-Burning Equipment	2113.15
32—00	Dry Cleaning Plants	415.7.4
40—01	Storage and Handling of Cellulose Nitrate Film	409.1
61—99	Prevention of Fires and Dust Explosions in Agricultural and Food Product Facilities	415.7.1
72—02	National Fire Alarm Code	505.4, 901.6, 903.4.1,904.3.5, 907.2, 907.2.1, 907.2.1.1, 907.2.10, 907.2.10.4, 907.2.11.2, 907.2.11.3, 907.2.12.2.3, 907.2.12.3, 907.4, 907.5, 907.9.2,907.10, 907.14, 907.16,907.17, 911.1, 3006.5
80—99	Fire Doors and Fire Windows	302.1.1.1, 715.3, 715.4.6.1, 715.4.4, 715.4.7.2, 715.5, 1008.1.3.3
85—04	Boiler and Combustion System Hazards Code (Note: NFPA 8503 has been incorporated into NFPA 85)	415.7.1
92B—05	Smoke Management Systems in Malls, Atria and Large Spaces	909.8
101—00	Life Safety Code	1024.6.2
105—03	Standard for the Installation of Smoke Door Assemblies	405.4.2, 715.3.3
110—02	Emergency and Standby Power Systems	2702.1
111—01	Stored Electrical Energy Emergency and Standby Power Systems	2702.1
120—99	Coal Preparation Plants	415.7.1
211—00	Chimneys, Fireplaces, Vents and Solid Fuel Burning Appliances	2112.5
230—99	Standard for the Fire Protection of Storage	507.2, 909.20.4.1
252—03	Standard Methods of Fire Tests of Door Assemblies	715.3.1, 715.3.2, 715.3.3, 715.3.4.1
253—00	Test for Critical Radiant Flux of Floor Covering	

	Systems Using a Radiant Heat Energy Source	406.6.4, 804.2, 804.3
257—00	Standard for Fire Test for Window and Glass Block Assemblies	715.3.3, 715.4, 715.4.1, 715.4.2
259—04	Test Method for Potential Heat of Building Materials	2603.4.1.10, 2603.5.3
265—02	Method of Fire Tests for Evaluating Room Fire Growth Contribution of Textile Wall Coverings on Full Height Panels and Walls	803.6.1, 803.6.1.1, 803.6.1.2
268—01	Standard Test Method for Determining Ignitibility of Exterior Wall Assemblies Using a Radiant Heat Energy Source	1406.2.1, 1406.2.1.1, 1406.2.1.2, 2603.5.7
285—98	Standard Method of Test for the Evaluation of Flammability Characteristics of Exterior Non load-bearing Wall Assemblies Containing Combustible Components	1407.10.4, 2603.5.5
286—00	Standard Method of Fire Test for Evaluating Contribution of Wall and Ceiling Interior Finish to Room Fire Growth	402.14.4,803.2, 803.2.1, 803.5, 2603.4, 2603.8
288—01	Standard Methods of Fire Tests of Floor Fire Door Assemblies in Fire-Resistance-Rated Floor Systems	712.4.6
303—00	Fire Protection Standards for Marinas and Boatyards	905.3.7
409—01	Aircraft Hangars	412.2.6, 412.4.5
418—01	Standard for Heliports	412.5.6
651—98	Machining and Finishing of Aluminum and the Production and Handling of Aluminum Powders	415.7.1
654—00	Prevention of Fire & Dust Explosions from the Manufacturing, Processing, and Handling of Combustible Particulate Solids	415.7.1
655—93	Prevention of Sulfur Fires and Explosions	415.7.1
664—98	Prevention of Fires Explosions in Wood Processing and Woodworking Facilities	415.7.1
701—99	Standard Methods of Fire Tests for Flame-Propagation of Textiles and Films	802.1, 805.1, 805.2, 3102.3.1, 3105.3,
704—01	Standard System for the Identification of the Hazards of Materials for Emergency Response	414.7.2, 415.2
1124—03	Manufacture, Transportation, and Storage of Fireworks and Pyrotechnic Articles	415.3.1
2001—04	Clean Agent Fire Extinguishing Systems	904.10

Purpose and Rationale Statement (Workgroup):
These amendments are needed due to the documented fire sprinkler attachment failures as a direct result of the 1994 Northridge Earthquake. The sway bracing attachment

requirements in NFPA 13 do not address the anticipated high seismic loads placed upon a fire sprinkler system during an earthquake in California.

Action Taken (Core Group):

[ ] Approved
[ ] Returned for further Study/Clarification/Justification
[ ] Recommended for Next Code Adoption Cycle
[ ] Disapproved
[X] Core Group Did Not Review (as of 01/09-11/06)

Appendix X____

APPENDIX ___

GROUP L - LABORATORIES

SECTION 101
GENERAL

101.1 Group L. This occupancy shall include buildings and structures or portions thereof, used as laboratories for scientific experimentation or research having quantities of materials not in excess of those listed in Tables 307.7(1) and 307.7(2) except as modified in this Appendix and not classified as Group B. This occupancy shall be designed and constructed in accordance with the requirements for a Group B Occupancy except as specified in this Appendix.

SECTION 102
REQUIREMENTS FOR GROUP L

102.1 Multiple Hazards. When a hazardous material has multiple hazards, all hazards shall be addressed and controlled in accordance with the provisions of this code.

102.2 Requirement for Report. The enforcing agency may require a technical opinion and report to identify and develop methods of protection from the hazards presented by the hazardous materials. A qualified person, firm, or corporation, approved by the enforcing agency, shall prepare the opinion and report, and shall be provided without charge to the enforcing agency. The opinion and report may include, but is not limited to, the preparation of a hazardous material management plan (HMMP); chemical analysis; recommendations for methods of isolation, separation, containment or protection of hazardous materials or processes, including appropriate engineering controls to be applied; the extent of changes in the hazardous behavior to be anticipated under conditions of exposure to fire or from hazard control procedures; and the limitations or conditions of use necessary to achieve and maintain control of the hazardous materials or operations. The report shall be entered into the files of the code enforcement agencies.

Proprietary and trade secret information shall be protected under the laws of the state or jurisdiction having authority.

102.3 Laboratory Suite. For purposes of this Appendix the definition of a "laboratory suite" shall be the same as a "control area" as defined by the *Building Code*.

102.4 Emergency Power. An emergency power system shall be provided. The emergency power system shall be designed and installed in accordance with the Electrical Code to automatically supply power to all required electrical equipment when the normal electrical supply system is interrupted. The exhaust system may be designed to operate at not less than one half the normal fan speed on the emergency power system when it is demonstrated that the level of exhaust will maintain a safe atmosphere.

102.5 Construction Type. Buildings containing Group L Occupancies shall be of Type I or Type IIA construction.

102.6 Floor Construction. Liquid-tight floors, which comply with ASTM D 2843 (OI greater than 25) and ASTM E 84 (Class 1), shall be required. Pipe and similar penetrations shall maintain the fire-resistive and liquid-tight characteristics of the floor a minimum of 4 inches (102 mm) at the bottom of walls from the floor level.

102.7 Occupancy Separation. The interstitial space above a laboratory shall be separated from a corridor by one-hour construction. Laboratories and similar areas shall not require an occupancy separation from each other when the use of the area is determined to be compatible. Classrooms and offices directly related to the use shall not require an occupancy separation.

102.8 Fume Hood Exhaust Ducts. Fume hood exhaust ducts exposed to fire-resistive exit corridors shall be separated from the corridor by one-hour fire-resistive construction.

SECTION 103
HAZARDOUS MATERIAL RESTRICTIONS

103.1 Hazardous Material Restrictions - Floors 1, 2, 3, and 1st Basement Level. Up through the third floor and down through the first basement level, the maximum quantity of hazardous materials per laboratory suite shall comply with Tables 307.7 (1) and 307.7 (2). Quantities of materials shall not be permitted to be increased with an approved automatic sprinkler system.

103.2 Hazardous Material Restrictions - Floors 4, 5, 6, and 2nd and 3rd Basement Levels. For the fourth, fifth, sixth floors, and the second and third basement levels, the maximum quantity of hazardous materials per laboratory suite shall be reduced to 75% of those allowed by Tables 307.7 (1) and 307.7 (2). Quantities of materials shall not be permitted to be increased with an approved automatic sprinkler system.

103.3 Hazardous Material Restrictions - Floors 7 and Above, and Below 3rd Basement Level. For the seventh floor and above, and below the third basement floor level, the maximum quantity of hazardous materials per laboratory suite shall be reduced to 50% of those allowed by Tables 307.7 (1) and 307.7 (2). Quantities of materials shall not be permitted to be increased with an approved automatic sprinkler system.

SECTION 104
VENTILATION

104.1 General Ventilation. In all Group L Occupancies, exhaust streams when combined shall not create a physical hazard or react to degrade the containment material. The building official may require a technical report in accordance with Section 102.2 of this Appendix.

Fire and smoke dampers in fume hood exhaust ducts are prohibited.

Ducts from laboratory hoods and local exhaust systems shall be constructed entirely of noncombustible material.

Exceptions:

1. Flexible ducts for special local exhausts used within a laboratory work suite.
2. Combustible ducts with flame-spread index less than 75 located within a shaft of noncombustible construction where passing through areas other than the laboratory suite they serve and provided with internal fire sprinklers.
3. Combustible ducts or duct linings having a flame spread of 25 or less.

Exhaust ducts from each laboratory suite shall be separately ducted to a point outside the building, to a mechanical space or to a shaft. Connection to a common duct may occur at those points. Exhaust ducts within the same laboratory suite may be combined within that laboratory suite.

Perchloric acid hoods and exhaust ducts shall be constructed of materials that are acid resistant, nonreactive, and impervious to perchloric acid. A water-spray system shall be provided for washing down the hood interior behind the baffle and the entire duct system. Ductwork shall provide a positive drainage slope back to the hood and shall consist of sealed sections. The hood baffle shall be removable for inspection.

104.2 Ventilation Rates. Ventilation rates shall comply with the requirements of the *Mechanical Code*.

SECTION 105
SPECIAL HAZARDS

105.1 Special Hazards. Storage, handling and use of hazardous materials in Group L shall comply with the *International Fire Code*.

SECTION 106
MEANS OF EGRESS

106.1 Access to Exits. Every portion of a Group L Occupancy having a floor area of 200 square feet or more shall have access to not less than two separate exits or exit-access doors.

106.2 Travel within Rooms. Within a Group L Occupancy all portions of any room shall be within 75 feet (22 860 mm) of an exit or exit-access door from the room. The distance of travel to an exit corridor or to an exit shall not exceed 100 feet (30 480 mm).

106.3 Door Swing. All exit and exit-access doors serving areas with hazardous materials shall swing in the direction of exit travel, regardless of the occupant load served.

106.4 Panic Hardware. Exit and exit-access doors from areas with hazardous materials shall not be provided with a latch or lock unless it is panic hardware.

106.5 Horizontal Exits. Buildings containing Group L Occupancies located four or more floors above the first floor shall have each floor of the building separated with at least one horizontal exit constructed as required for a two-hour fire-resistive occupancy separation. Each side of the horizontal exit shall be provided with a separate mechanical exhaust system without interconnection. No side shall be less than 30 percent of the total area for the floor. At least one elevator shall be provided to serve the floor on each side of the horizontal exit wall and shall comply with the provisions of the *Building Code*.

SECTION 107
FIRE PROTECTION SYSTEMS

107.1 Automatic Fire Protection System. An automatic fire protection system shall be installed throughout buildings housing Group L Occupancies. Sprinkler system design for research laboratories and similar areas of a Group L Occupancy shall not be less than that required for Ordinary Hazard Group 2 with a design area of not less than 3,000 square feet (279 m2).

SECTION 108
EXISTING BUILDINGS

108.1 General. Alterations, repairs, or additions may be made to any building or structure without requiring the existing building or structure to comply with all the requirements of this Appendix, provided the addition, alteration, or repair conforms to the requirements of this Appendix.

108.2 Unsafe Condition. Alterations, repairs, or additions shall not be made to an existing building or structure that will cause the existing building or structure to be in violation of any of the provisions of this code, nor shall such alterations or additions cause the existing building or structure to become unsafe. An unsafe condition shall be deemed to have been created if an alteration or addition will cause the existing building or structure to become structurally unsafe or overloaded; will not provide adequate egress in compliance with the provisions of this code or will obstruct existing exits; will create a fire hazard; will reduce required fire resistance or will otherwise create conditions dangerous to human life.

108.3 Changes in Use or Occupancy. Any building so altered, which involves a change in use or occupancy, shall not exceed the height, number of stories and area permitted for new buildings. Any building plus new additions shall not exceed the height, number of stories and area permitted for new buildings.

108.4 Buildings Not in Compliance with Code. Alterations or additions shall not be made to an existing building or structure when such existing building or structure is not in full compliance with the provisions of this code except when such alteration or addition will result in the existing building or structure being no more hazardous, based on life safety, fire safety and sanitation, than before such additions or alterations are undertaken.

108.5 Maintenance of Structural and Fire Resistive Integrity Alterations or repairs to an existing building or structure that are nonstructural and do not adversely affect any structural member of any part of the building or structure having required fire resistance may be made with the same materials of which the building or structure is constructed.

108.6 Continuation of Existing Use. Buildings in existence at the time of the adoption of this code may have their existing use or occupancy continued if such use or occupancy was legal at the time of the adoption of this code, provided such continued use is not dangerous to life.

108.7 Automatic Fire Protection Systems. In mixed occupancies, portions of floors or buildings not classified as Group L Occupancies shall be provided with sprinkler protection designed of not less than that required for Ordinary Hazard Group 1 with a design area of not less than 3,000 square feet (279 m2).

Purpose and Rationale Statement (Workgroup):

APPENDIX ___

GROUP L - LABORATORIES

SECTION 101
GENERAL

101.1 Group L. This occupancy shall include buildings and structures or portions thereof, used as laboratories for scientific experimentation or research having quantities of materials not in excess of those listed in Tables 307.7(1) and 307.7(2) except as modified in this Appendix and not classified as Group B. This occupancy shall be designed and constructed in accordance with the requirements for a Group B Occupancy except as specified in this Appendix.

SECTION 102
REQUIREMENTS FOR GROUP L

102.1 Multiple Hazards. When a hazardous material has multiple hazards, all hazards shall be addressed and controlled in accordance with the provisions of this code.

102.2 Requirement for Report. The enforcing agency may require a technical opinion and report to identify and develop methods of protection from the hazards presented by the hazardous materials. A qualified person, firm, or corporation, approved by the enforcing agency, shall prepare the opinion and report, and shall be provided without charge to the enforcing agency. The opinion and report may include, but is not limited to, the preparation of a hazardous material management plan (HMMP); chemical analysis; recommendations for methods of isolation, separation, containment or protection of hazardous materials or processes, including appropriate engineering controls to be applied; the extent of changes in the hazardous behavior to be anticipated under conditions of exposure to fire or from hazard control procedures; and the limitations or conditions of use necessary to achieve and maintain control of the hazardous materials or operations. The report shall be entered into the files of the code enforcement agencies. Proprietary and trade secret information shall be protected under the laws of the state or jurisdiction having authority.

102.3 Laboratory Suite. For purposes of this Appendix the definition of a "laboratory suite" shall be the same as a "control area" as defined by the *Building Code*.

102.4 Emergency Power. An emergency power system shall be provided. The emergency power system shall be designed and installed in accordance with the Electrical Code to automatically supply power to all required electrical equipment when the normal electrical supply system is interrupted. The exhaust system may be designed to operate at not less than one half the normal fan speed on the emergency power system when it is demonstrated that the level of exhaust will maintain a safe atmosphere.

102.5 Construction Type. Buildings containing Group L Occupancies shall be of Type I or Type IIA construction.

102.6 Floor Construction. Liquid-tight floors, which comply with ASTM D 2843 (OI greater than 25) and ASTM E 84 (Class 1), shall be required. Pipe and similar penetrations shall maintain the fire-resistive and liquid-tight characteristics of the floor a minimum of 4 inches (102 mm) at the bottom of walls from the floor level.

102.7 Occupancy Separation. The interstitial space above a laboratory shall be separated from a corridor by one-hour construction. Laboratories and similar areas shall not require an occupancy separation from each other when the use of the area is determined to be compatible. Classrooms and offices directly related to the use shall not require an occupancy separation.

102.8 Fume Hood Exhaust Ducts. Fume hood exhaust ducts exposed to fire-resistive exit corridors shall be separated from the corridor by one-hour fire-resistive construction.

SECTION 103

HAZARDOUS MATERIAL RESTRICTIONS

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103.2 Hazardous Material Restrictions - Floors 4, 5, 6, and 2nd and 3rd Basement Levels. For the fourth, fifth, sixth floors, and the second and third basement levels, the maximum quantity of hazardous materials per laboratory suite shall be reduced to 75% of those allowed by Tables 307.7 (1) and 307.7 (2). Quantities of materials shall not be permitted to be increased with an approved automatic sprinkler system.

103.3 Hazardous Material Restrictions - Floors 7 and Above, and Below 3rd Basement Level. For the seventh floor and above, and below the third basement floor level, the maximum quantity of hazardous materials per laboratory suite shall be reduced to 50% of those allowed by Tables 307.7 (1) and 307.7 (2). Quantities of materials shall not be permitted to be increased with an approved automatic sprinkler system.

SECTION 104
VENTILATION

104.1 General Ventilation. In all Group L Occupancies, exhaust streams when combined shall not create a physical hazard or react to degrade the containment material. The building official may require a technical report in accordance with Section 102.2 of this Appendix.

Fire and smoke dampers in fume hood exhaust ducts are prohibited.

Ducts from laboratory hoods and local exhaust systems shall be constructed entirely of noncombustible material.

Exceptions:

4. Flexible ducts for special local exhausts used within a laboratory work suite.
5. Combustible ducts with flame-spread index less than 75 located within a shaft of noncombustible construction where passing through areas other than the laboratory suite they serve and provided with internal fire sprinklers.
6. Combustible ducts or duct linings having a flame spread of 25 or less.

Exhaust ducts from each laboratory suite shall be separately ducted to a point outside the building, to a mechanical space or to a shaft. Connection to a common duct may occur at those points. Exhaust ducts within the same laboratory suite may be combined within that laboratory suite.

Perchloric acid hoods and exhaust ducts shall be constructed of materials that are acid resistant, nonreactive, and impervious to perchloric acid. A water-spray system shall be provided for washing down

the hood interior behind the baffle and the entire duct system. Ductwork shall provide a positive drainage slope back to the hood and shall consist of sealed sections. The hood baffle shall be removable for inspection.

104.2 Ventilation Rates. Ventilation rates shall comply with the requirements of the *Mechanical Code*.

SECTION 105
SPECIAL HAZARDS

105.1 Special Hazards. Storage, handling and use of hazardous materials in Group L shall comply with the *International Fire Code*.

SECTION 106
MEANS OF EGRESS

106.1 Access to Exits. Every portion of a Group L Occupancy having a floor area of 200 square feet or more shall have access to not less than two separate exits or exit-access doors.

106.2 Travel within Rooms. Within a Group L Occupancy all portions of any room shall be within 75 feet (22 860 mm) of an exit or exit-access door from the room. The distance of travel to an exit corridor or to an exit shall not exceed 100 feet (30 480 mm).

106.3 Door Swing. All exit and exit-access doors serving areas with hazardous materials shall swing in the direction of exit travel, regardless of the occupant load served.

106.4 Panic Hardware. Exit and exit-access doors from areas with hazardous materials shall not be provided with a latch or lock unless it is panic hardware.

106.5 Horizontal Exits. Buildings containing Group L Occupancies located four or more floors above the first floor shall have each floor of the building separated with at least one horizontal exit constructed as required for a two-hour fire-resistive occupancy separation. Each side of the horizontal exit shall be provided with a separate mechanical exhaust system without interconnection. No side shall be less than 30 percent of the total area for the floor. At least one elevator shall be provided to serve the floor on each side of the horizontal exit wall and shall comply with the provisions of the *Building Code*.

SECTION 107
FIRE PROTECTION SYSTEMS

107.1 Automatic Fire Protection System. An automatic fire protection system shall be installed throughout buildings housing Group L Occupancies. Sprinkler system design for research laboratories and similar areas of a Group L Occupancy shall not be less than that required for Ordinary Hazard Group 2 with a design area of not less than 3,000 square feet (279 m2).

SECTION 108
EXISTING BUILDINGS

108.1 General. Alterations, repairs, or additions may be made to any building or structure without requiring the existing building or structure to comply with all the requirements of this Appendix, provided the addition, alteration, or repair conforms to the requirements of this Appendix.

108.2 Unsafe Condition. Alterations, repairs, or additions shall not be made to an existing building or structure that will cause the existing building or structure to be in violation of any of the provisions of this code, nor shall such alterations or additions cause the existing building or structure to become unsafe. An unsafe condition shall be deemed to have been created if an alteration or addition will cause the existing building or structure to become structurally unsafe or overloaded; will not provide adequate egress in compliance with the provisions of this code or will obstruct existing exits; will create a fire hazard; will reduce required fire resistance or will otherwise create conditions dangerous to human life.

108.3 Changes in Use or Occupancy. Any building so altered, which involves a change in use or occupancy, shall not exceed the height, number of stories and area permitted for new buildings. Any building plus new additions shall not exceed the height, number of stories and area permitted for new buildings.

108.4 Buildings Not in Compliance with Code. Alterations or additions shall not be made to an existing building or structure when such existing building or structure is not in full compliance with the provisions of this code except when such alteration or addition will result in the existing building or structure being no more hazardous, based on life safety, fire safety and sanitation, than before such additions or alterations are undertaken.

108.5 Maintenance of Structural and Fire Resistive Integrity Alterations or repairs to an existing building or structure that are nonstructural and do not adversely affect any structural member of any part of the building or structure having required fire resistance may be made with the same materials of which the building or structure is constructed.

108.6 Continuation of Existing Use. Buildings in existence at the time of the adoption of this code may have their existing use or occupancy continued if such use or occupancy was legal at the time of the adoption of this code, provided such continued use is not dangerous to life.

108.7 Automatic Fire Protection Systems. In mixed occupancies, portions of floors or buildings not classified as Group L Occupancies shall be provided with sprinkler protection designed of not less than that required for Ordinary Hazard Group 1 with a design area of not less than 3,000 square feet (279 m2).

Purpose and Rationale Statement (Workgroup):
(Government Code Section 11346.2 requires a statement of specific purpose of **EACH** adoption, amendment, or repeal and the rational the determination by the agency that

EACH adoption, amendment, or repeal is reasonably necessary to carry out the purpose for which it is proposed.)

Chapter 34
Existing Structures

SECTION 3403 ADDITIONS, ALTERATIONS OR REPAIRS
3403.1 Existing buildings or structures.
Additions or alterations to any building or structure shall conform with the requirements of the code for new construction. Additions or alterations shall not be made to an existing building or structure which will cause the existing building or structure to be in violation of any provisions of this code. An existing building plus additions shall comply with the height and area provisions of Chapter 5. Portions of the structure not altered and not affected by the alteration are not required to comply with the code requirements for a new structure. [For SMF] Existing Group H8 Laboratories. Existing laboratories and similar areas used for scientific experimentation, research, or instructional purposes, (former California Building Code Occupancy Group H-8) designed in compliance with previous code requirements, may have existing laboratories renovated or non-laboratory spaces converted into laboratory facilities provided they comply with all provisions of Appendix Chapter _____, Group L, Laboratories.

In the 1990s, a San Francisco Bay Area multidisciplinary team of consultants, fire marshals, and university administrators, working with the California State Fire Marshal, developed distinct fire and life safety code requirements for research laboratories not associated with the semiconductor fabrication industry or general industry use. This effort recognized the need for code requirements based on risks and hazards related to the use of hazardous chemicals in laboratories. The resulting work was an occupancy classification known as "H-8" based on the Uniform Building Code. While not ideal, this classification was the first step toward recognizing the differences in facilities where scientific investigation occurred.

The International Building Code being adopted by California imposes new restrictions on the new construction and height of buildings that use, store, or handle hazardous materials not commensurate with the actual risks and hazards related to laboratories. Furthermore, the "B" and "H" occupancy classifications are the only classifications for laboratories. The IBC requirements and its referenced documents are overly restrictive, impractical, and impose severe hardships on existing H8 research laboratories, and make it difficult or prevent existing laboratories from being remodeled, renovated, or expanded. This result would be a significant setback to the design and construction of these types of facilities in California. Therefore, a new Appendix Chapter, L, Laboratories, is proposed specifically to address these types of laboratory facilities and the actual hazards of their operation.

Under the 2001 California Building Code, an existing 15 story H-8 laboratory building with a laboratory suite on the 7th floor built to code could be renovated or expanded as long as that laboratory suite's quantities of hazardous materials remained within the

allowable limits. If that same laboratory were to be renovated under the 2003 IBC, the entire floor would be required to have two control zones separated by a two-hour occupancy separation fire wall. This would require extensive construction outside the project area and disrupt the occupancy in the adjacent occupied areas. An inventory would be required for every room within the control area, which would also include the laboratory where the construction work would take place. Once the control area inventory is totaled up, including the laboratory to be remodeled, then is it necessary to verify that those quantities will not exceed 5% of those allowed in Tables 307.7(1) and 307.7 (2).

Recognizing the past efforts and success of the H-8 occupancy classification, it is critical that research laboratories, in which limited quantities of hazardous materials are used, continue to have a distinct occupancy apart from the industrial or production-scale user of hazardous materials. Also, laboratories designed to these H8 California standards for the past 15 years have operated successfully, especially in academic research facilities, with exemplary fire and life safety records. Therefore, a new Appendix Chapter _____, L, Laboratories is being proposed for the new California Building Code. This chapter is the compilation of requirements that were located throughout the building code. They can be used for both new construction of research laboratories and for renovations to existing laboratories.

The chapter incorporates requirements not found in the IBC and allows the design of "open space" research laboratories (i.e., flexibility) that promotes collaboration in the pursuit of scientific discovery and intellectual property that result from the interdisciplinary nature of academic research in this environment. Facilities built as H-8, e.g., Clark Center on the Stanford University campus, report that significant developments have been made that would not have been possible if the researchers did not have the openness and contact with those from other disciplines. Other institutions in California and in the United States are using this multidisciplinary scientific discovery approach in laboratories. To eliminate the code requirements that allow the construction of these types of facilities would be setback to scientific community.

This Appendix's requirements for research laboratories would in a safe environment:

- Promote scientific interactions;
- Promote sharing of commonly used re-agents, reducing costs;
- Allow the use of fewer chemical storage areas resulting in initial construction or renovation cost savings and fewer places where accidents can occur;
- Allow fewer waste accumulation areas and making it easier to install "space for waste" cabinets and making pick up of wastes easier (few places mean fewer trips to fewer areas by waste pick-up personnel;
- Restrict the amount of hazardous material that can be maintained per square foot by adhering to exempt limits of hazardous materials
- Require less space for storage, which means more space for laboratory benches, equipment, support rooms, etc. and reducing costs.

This proposed Appendix Chapter defines research laboratory occupancy and provides minimum standards specific to such laboratories. The State Fire Marshal could adopt the entire Appendix Chapter, thereby, not affecting other parts of the model code.

TECHNICAL, THEORETICAL, AND EMPIRICAL STUDY, REPORT, OR SIMILAR DOCUMENTS:

(Government Code Section 11346.2(b)(2) requires an identification of each technical, theoretical, and empirical study, report, or similar document, if any, upon which the agency relies in proposing the regulation(s).)

A December 2004 Vanderbilt University Report by Robert F. Wheaton, Director Vanderbilt Environment, Health and Safety, was written on the adoption of the 2003 International Building Code and referenced International Fire Code. The report found problems using the code for the design of its research and clinical program laboratories, particularly in biomedical research – severe restrictions such as the per floor limitations on the quantity of hazardous materials and the allowable number of control or fire zones. Excerpts from the report stated:

> "These codes are highly restrictive of the aggregate amount of certain classes of hazardous chemicals that can be used and stored in research laboratories. In particular, they fail to recognize that the risk involved in the use of hazardous chemicals in research laboratories is significantly less that in the similar use in industrial applications." It further states that: "the application of certain sections of these codes to newly constructed, planned and/or existing research facilities will substantially limit research scope and can adversely affect the use of hundreds of thousands of square feet of research space with little or no impact on Metro fire fighters, first responders or public safety." …

The risks and hazards related to the use of hazardous chemicals in laboratories are often overestimated. Laboratory use of hazardous chemicals means handling or use of hazardous chemicals in a manner such that: (i) chemical manipulations are done on a "laboratory scale" (i.e., conducted by a single or a few individuals in small quantities);… (iii) the procedures involved are not part of a production process…; and (iv) protective laboratory practices and equipment are available and in common use to minimize the potential for exposure to hazardous chemicals."

CONSIDERATION OF REASONALBLE ALTERNATIVES

(Government Code Section 11346.2(b)(3)(A) requires a description of reasonable alternatives to the regulation and the agency's reason for rejecting those alternatives. In the case of a regulation that would mandate the use of specific technologies or equipment or prescribe specific action or procedures, the imposition of performance standards shall be considered as an alternate)

[Describe reasonable alternatives and reason for rejecting those alternatives]

An alternative to the stand-alone Appendix Chapter would be amending the entire model code to include fire and life safety requirements specifically for research laboratories. This alternative has been rejected because it would not represent the philosophy and approach described in State Fire Marshal Grijalva's letter of July 12, 2005 and reiterated in State and Consumer Services Agency Chairman, Fred Aguiar's letter of September 21, 2005 to the code community. That approach of developing fire and life safety provisions of the California Building and Fire Codes is described as "a holistic approach to public safety …the intent is that the final adoption package will include amendments necessary to reasonably maintain a substantially equivalent level of fire and life safety in California."

REASONABLE ALTERNATIVES THE AGENCY HAS IDENTIFIED THAT WOULD LESSEN ANY ADVERSE IMPACT ON SMALL BUSINESS.
(Government Code Section 11346.2(b)(3)(B) requires a description of any reasonable alternatives that have been identified or that have otherwise been identified and brought to the attention of the agency that would lessen any adverse impact on small business. Include facts, evidence, documents, testimony, or other evidence upon which the agency relies to support an initial determination that the action will not have a significant adverse impact on business.)

[Describe reasonable alternatives and reason for rejecting]

Not applicable.

FACTS, EVIDENCE, DOCUMENTS, TESTIMONY, OR OTHER EVIDENCE OF NO SIGNIFICANT ADVERSE IMPACT ON BUSINESS.
(Government Code Section 11346.2(B)(4) requires the facts, evidence, documents, testimony, or other evidence on which the agency relies in to support an initial determination that the action will not have a significant adverse economic impact on business)

[Describe the facts, evidence, documemets, testimony or other evidence]

Not applicable.

DUPLICATION OR CONFLICTS WITH FEDERAL REGULATIONS
(Government Code Section 113465.2(b)(5) requires a department, board, or commission within the Environmental Protection Agency, the Resources Agency, or the Office of the State Fire Marshal to describe its efforts, in connection with a proposed rulemaking action, to avoid unnecessary duplication or conflicts with federal regulations contained in the Code of Federal Regulations addressing the same issues. These agencies may adopt regulations different from these federal regulations upon a finding of one or more of the following justifications: (A) The differing state regulations are authorized by law and/or (B) The cost of differing state regulations is justified by the benefit to human health, public safety, public welfare, or the environment. It is not the intent of this paragraph to

require the agency to artificially construct alternatives or to justify why it has not identified alternatives)

[DESCRIBE EFFORTS, if applicable]

Many guidelines have been written for the design and operation of research laboratories, but these standards are best used in conjunction with the state or local building and fire codes. Therefore, there is no duplication

Southern H Occupancy Workgroup Comments:

- Do not make this "H" an appendix section. Put the section into the body of the code identifying them appropriately, such as a Section 415.10
- Section 103 puts allowable quantities into a text format…make it a Table
- Limit this to University/College campuses only in the first paragraph or scope
- Control area concept referred to would require 2 hour separation and for Type IIA at floor 4 and above…might want to review, would have to propose an exception to 414.
- 102.7 refers to "occupancy separation" which is no longer used in the I code
- Clean up to make consistent with the I code language

Action Taken (Core Group):
The Core Group discussed this proposal at length and question whether it would be appropriate to place the Group "L" Occupancy within the H Occupancy Section(s) of the Code or leave it as an Appendix Item unto itself. A further discussion was held on the term "campus" and discussion as to whether it was for Public and Private Colleges and Universities and what situations could arise if Group "L" Occupancies were built within an Office Building used by a University or College defined as a "campus". These issues would be referred back to the WorkGroup for clarification.

[ ] Approved
[X] Returned for further Study/Clarification/Justification
[ ] Recommended for Next Code Adoption Cycle
[ ] Disapproved
[ ] Core Group Did Not Review (as of 01/09-11/06)

# # # #

Purpose and Rationale Statement (Workgroup):

Action Taken (Core Group):

[ ] Approved
[ ] Returned for further Study/Clarification/Justification
[ ] Recommended for Next Code Adoption Cycle
[ ] Disapproved

[ ] Core Group Did Not Review (as of 01/09-11/06)